

IN THE "ABSTRACT" Section

Please amend the ABSTRACT section as indicated below.

ABSTRACT

An injector system for injection of a fluid medium into a patient within an electromagnetic isolation area. The injector system includes a powered injector, a system controller therefor, and a plurality of communication units. The powered injector is positioned within the isolation area. A first communication unit integral with the powered injector enables the first communication unit and the powered injector to be moved as a unit. The system controller is positioned outside the isolation area and has a second communication unit integral therewith. An intermediate communication unit ensures communication between the first and the second communication units and therethrough between the powered injector and the system controller using an authentication technique therewith. The first, second and intermediate communication units are adapted to communicate by transmission of radio frequency (RF) energy. The RF energy is chosen to avoid interfering with the operation of MRI scanners.

[A communication system for use in an MRI procedure includes a first communication unit positioned within a shielded housing on an interior side of the isolation barrier. The first communication unit includes a first receiver and a first transmitter. The communication system also includes a second communication unit positioned on an exterior side of the isolation barrier. The second communication unit includes a second receiver and a second transmitter. The first communication unit is in connection via optical cabling with a first light transmitting device positioned on an interior side of the isolation barrier adjacent a viewing window in the isolation barrier. The second communication unit is in connection via optical cabling with a second light transmitting device positioned on the exterior side of the isolation barrier adjacent a viewing window in the isolation barrier. The first communication unit and the second communication unit communicate via transmission of optical energy between the first light transmitting device and the second light transmitting device.]